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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,429	06/29/2001	Gordon Scott Scholler	HO-P02234US0	8238

26271 7590 10/20/2003
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EXAMINER

FARAH, AHMED M

ART UNIT PAPER NUMBER

3739

DATE MAILED: 10/20/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/896,429

Applicant(s)
Scholler et al.

Examiner
Ahmed M. Farah

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3739



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 13, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 12 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Lai (U.S. Patent No. 5,549,632) in view of Swinger et al. U.S. Patent No. 6,325,792 B1) and in view of Davidson (U.S. Patent No. 5,282,088).

Lai discloses ophthalmic surgery apparatus and method for determining and controlling the location of interaction point between a patient's eye and surgical laser beam, the apparatus comprising:

an interface **109** adapted to couple the patient's eye to a surgical laser **100** (see Fig. 1);

an attachment means **115** adapted to overlay the anterior surface of the eye to provide stable engagement to the eye (see Fig. 3); and

an applanation lens **111** mounted to the attachment means (see Fig. 4C), the applanation lens having an applanation surface configured to contact the eye, and therefore, applanate or flatten the anterior surface of the eye upon application of pressure.

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As to claims 13-18, Fig. 4C of Lai teaches the use of a suction ring **501** adapted to the bottom surface of the interface so as to stabilize the position of the interface relative to the operative area of the eye.

Lai further teaches that his laser provides a laser beam suitable for ophthalmic surgery (see Claim 1, lines 4-5). However, although he describes the use of various known ophthalmic surgery lasers, which would provide the wavelength ranges of the instant claims (i.e., 275 nm - 2500 nm), he does not particularly specify the type of laser used with his invention. He further fails to teach the material in which the applanation lens is made of, or its relative transmission in the laser wavelength.

Swinger et al. teach an alternative ophthalmic surgical apparatus and method comprising: an ultraviolet (UV) laser **52**, which provides the ablation energy (see Col. 28, lines 8-17); and an applanation lens **78** having an applanation surface configured to contact the patient's eye (see Fig. 15D; and Col. 26, lines 21-27). Their applanation lens transmits the ablative laser beams produced by the UV laser. However, although their applanation lens is configured to transmit the irradiated UV, they do not teach the material in which the lens is being formed.

Davidson teaches an applanation lens which has no, or negligible, spherical aberration on or near its axis. He teaches that if the lens is made from a fused silica, then it is transparent in the UV, down to about 180 nm. In this Office Action, the lens of Davison, which is made from a material that is analogous to materials of the instantly claimed lens, is treated to have 'a purity

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great enough to resist discoloration upon prolonged irradiation produced by high energy irradiation sources such as UV, X-rays, gamma rays , etc.'

Therefore, it would have been obvious to one skilled in the art at the time of the applicant's invention to modify Lai with Swinger et al. and use a UV laser as an alternative source to provide the ablation energy. The use of UV-grade lenses to transmit the maximum intensity/energy of an irradiated UV light is well known in the art. Hence, it would have been further obvious to one skilled in the art to modify Lai with Swinger et al. and in view of Davidson to make the applanation lens from a fused silica or material that transmits UV light, and withstands prolonged high-energy irradiation such as UV, X-rays, or gamma rays in order to avoid discoloration/degradation that may be subjected to the lens. The use of such lens would maintain/prolong the integrity of the lens, and therefore, would be cost effective. It would further eliminate the time needed to re-align a surgical system with an ordinary glass lens in the case the lens is damaged and its focusing properties changed.

Response to Arguments

3. Applicant's arguments filed May 13, 2003 have been fully considered but they are not persuasive. The applicants make the following arguments:

A. The applicants argue that the lens of Davidson, which is made of fused silica, is transparent to UV range, not to gamma radiation. They further argue that "Davidson makes no

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mention of gamma radiation and fails to mention any effect of gamma radiation on fused silica, let alone teach that the fused silica is transparent after being subjected to gamma radiation.

B. They argue that the examiner has failed to provide motivation for combining the references. They further argue that the prior art of record do not teach or suggest all the claim limitations.

In response to the first argument, the Examiner agrees with the applicants that Davidson “makes no mention of gamma radiation” and fails ‘to mention any effects of gamma radiation on fused silica.’ However, in paragraph 0047 (page 12) of the specification, the applicants clearly teach that their lens is made of fused silica. Therefore, the lens of Davidson, which is made of fused silica is analogous to applanator lens recited in the claims. Hence, the examiner’s position is that since both lens (lens of Davidson and the lens recited in the claims) are made of fused silica, the lens of Davidson would not discolor or lose transmittance when subjected to gamma radiation.

With respect to the second argument, it is not required that the prior art disclose or suggest the properties newly-discovered by an applicant in order for there to be a prima facie case of obviousness. See *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897, 1905 (Fed. Cir. 1990). Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. See *In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429

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F.2d 447, 166 USPQ 545 (CCPA 1970). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references.

Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F. 2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Farah whose telephone number is (703) 305-5787. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak, can be reached on (703) 308-0994. The official fax number for the group is (703) 872-9302; the fax number for After Final is (703) 872-9303; and the Examiner's Desk-top fax is (703) 746-3368.

A. M. Farah

Patent Examiner (Art Unit 3739)



October 16, 2003.



Lee Cohen
Primary Examiner